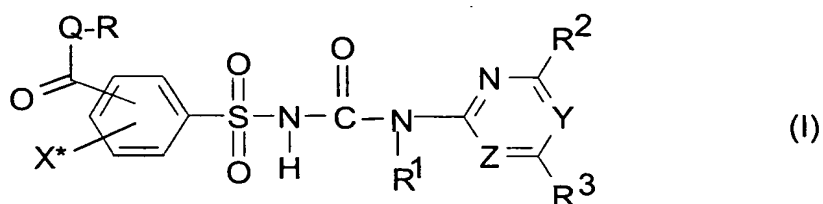


## Claims:

1. A process for preparing the compound of the formula (I) or a salt thereof



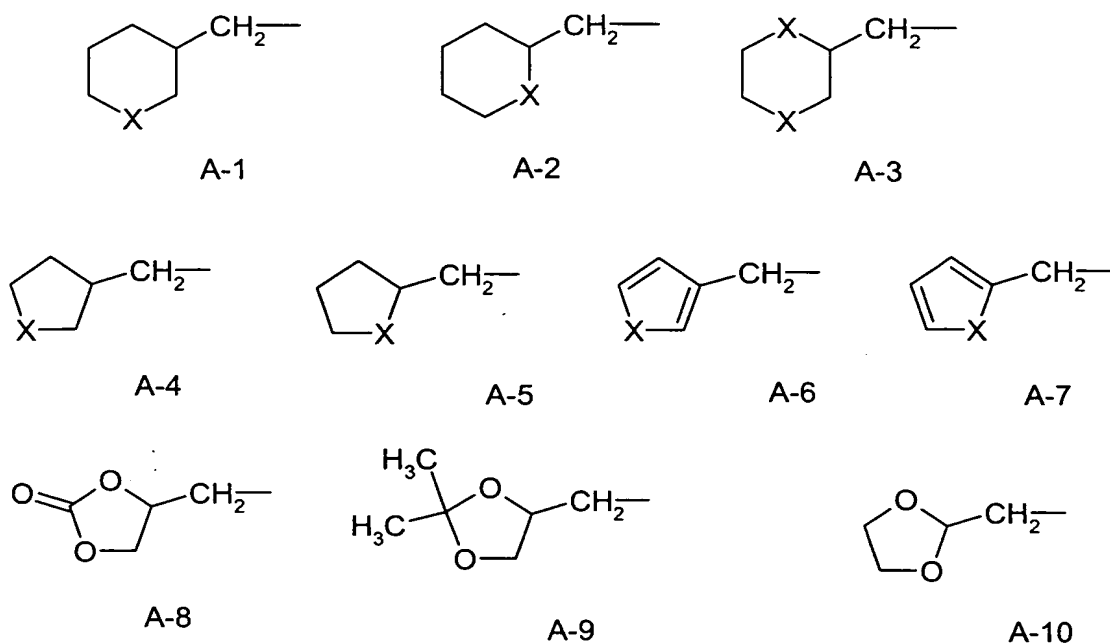
where

Q is oxygen or sulfur,

X\* is hydrogen, halogen, cyano, nitro, (C<sub>1</sub>-C<sub>3</sub>)-alkyl or methoxy,

Y,Z independently of one another are CH or N, where Y and Z are not simultaneously CH,

R is hydrogen, (C<sub>1</sub>-C<sub>12</sub>)-alkyl, (C<sub>2</sub>-C<sub>10</sub>)-alkenyl, (C<sub>2</sub>-C<sub>10</sub>)-alkynyl, (C<sub>1</sub>-C<sub>6</sub>)-alkyl which is mono- to tetra-substituted by radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy, (C<sub>1</sub>-C<sub>4</sub>)-alkylthio, CN, [(C<sub>1</sub>-C<sub>4</sub>)-alkoxy]carbonyl and (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, or (C<sub>3</sub>-C<sub>8</sub>)-cycloalkyl which is unsubstituted or substituted by radicals selected from the group consisting of (C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy, (C<sub>1</sub>-C<sub>4</sub>)-alkylthio and halogen, (C<sub>5</sub>-C<sub>8</sub>)-cycloalkenyl, phenyl-(C<sub>1</sub>-C<sub>4</sub>)-alkyl which is unsubstituted in the phenyl radical or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy, (C<sub>1</sub>-C<sub>4</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkylthio, [(C<sub>1</sub>-C<sub>4</sub>)-alkoxy]carbonyl, [(C<sub>1</sub>-C<sub>4</sub>)-alkyl]carbonyloxy, carbamoyl, [(C<sub>1</sub>-C<sub>4</sub>)-alkyl]carbonylamino, [(C<sub>1</sub>-C<sub>4</sub>)-alkyl]aminocarbonyl, di-[(C<sub>1</sub>-C<sub>4</sub>)-alkyl]aminocarbonyl and nitro, or a radical of the formulae A-1 to A-10



where in the formulae A-1 to A-10

the radical X or the radicals X independently of one another is/are O, S, S(O) or SO<sub>2</sub>,

R<sup>1</sup> is hydrogen or (C<sub>1</sub>-C<sub>3</sub>)-alkyl,

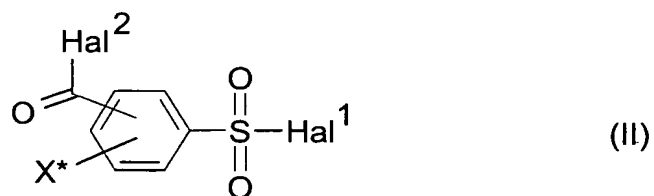
R<sup>2</sup> is hydrogen, halogen, (C<sub>1</sub>-C<sub>3</sub>)-alkyl or (C<sub>1</sub>-C<sub>3</sub>)-alkoxy, where each of the two last-mentioned radicals is unsubstituted or mono- or polysubstituted by halogen or (C<sub>1</sub>-C<sub>3</sub>)-alkoxy,

R<sup>3</sup> is hydrogen, halogen, (C<sub>1</sub>-C<sub>3</sub>)-alkyl, (C<sub>1</sub>-C<sub>3</sub>)-alkoxy or (C<sub>1</sub>-C<sub>3</sub>)-alkylthio, where each of the three last-mentioned radicals is unsubstituted or mono- or polysubstituted by halogen or mono- or disubstituted by (C<sub>1</sub>-C<sub>3</sub>)-alkoxy or (C<sub>1</sub>-C<sub>3</sub>)-alkylthio, or a radical of the formula NR<sup>4</sup>R<sup>5</sup>, (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl, (C<sub>2</sub>-C<sub>4</sub>)-alkenyl, (C<sub>2</sub>-C<sub>4</sub>)-alkynyl, (C<sub>3</sub>-C<sub>4</sub>)-alkenyloxy or (C<sub>3</sub>-C<sub>4</sub>)-alkynyloxy,

R<sup>4</sup> and R<sup>5</sup> independently of one another are hydrogen, (C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>3</sub>-C<sub>4</sub>)-alkenyl, (C<sub>1</sub>-C<sub>4</sub>)-haloalkyl or (C<sub>1</sub>-C<sub>4</sub>)-alkoxy,

which comprises

a) converting a compound of the formula (II)



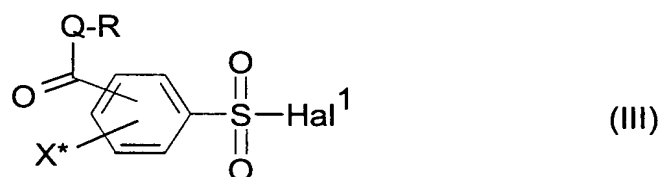
where

Hal<sup>1</sup> is a halogen atom,

Hal<sup>2</sup> is a halogen atom and

X\* is as defined in formula (I)

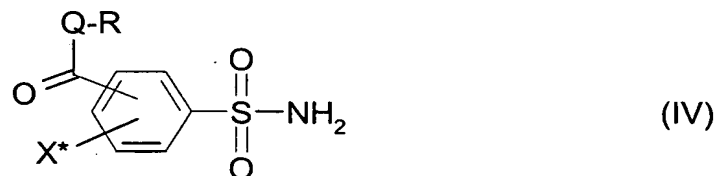
by reaction with a compound of the formula R-Q-H or a salt thereof into a compound of the formula (III)



where R, Q and X are as defined in formula (I) and Hal<sup>1</sup> is as defined in formula (II), and

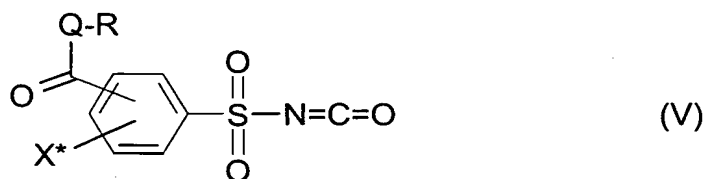
(b) with or without intermediate isolation either

(b1) ammonolysing the resulting compound (III) to give the sulfonamide of the formula (IV)



where R, Q and X\* are as defined in formula (III),

and converting the compound (IV) with or without intermediate isolation with phosgene into the phenylsulfonyl isocyanate of the formula (V)



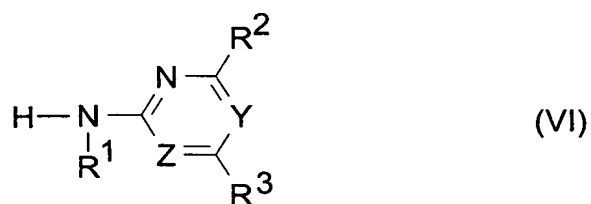
where R, Q and X\* are as defined in formula (III),

or

(b2) converting the resulting compound (III) with a cyanate into the isocyanate of the formula (V) or a solvated (stabilized) derivative thereof,

and

(c) converting the isocyanate of the formula (V) or its stabilized derivative, with or preferably without intermediate isolation, with a heterocyclic amine of the formula (VI)



where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, Y and Z are as defined in formula (I),

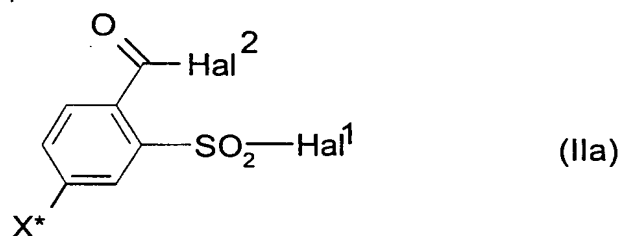
into the sulfonylurea of the formula (I) or a salt thereof.

2. The process as claimed in claim 1, wherein in the compound of the formula (I) or its salt

Q is an oxygen atom,

- $X^*$  is a hydrogen atom or a halogen atom,  
 $R$  is (C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>2</sub>-C<sub>4</sub>)-alkenyl, (C<sub>2</sub>-C<sub>4</sub>)-alkynyl, (C<sub>1</sub>-C<sub>4</sub>)-haloalkyl or (C<sub>1</sub>-C<sub>4</sub>)-alkoxy(C<sub>1</sub>-C<sub>4</sub>)-alkyl,  
 $R^1$  is a hydrogen atom,  
 $R^2$  is (C<sub>1</sub>-C<sub>4</sub>)-alkyl or (C<sub>1</sub>-C<sub>4</sub>)-alkoxy,  
 $R^3$  is (C<sub>1</sub>-C<sub>4</sub>)-alkyl or (C<sub>1</sub>-C<sub>4</sub>)-alkoxy,  
 $Y$  is a nitrogen atom or a group of the formula CH and  
 $Z$  is a nitrogen atom.

3. The process as claimed in claim 1 or 2, wherein in step a) the compounds of the formula (II) used are compounds of the formula (IIa):



where

$Hal^1$  is halogen,

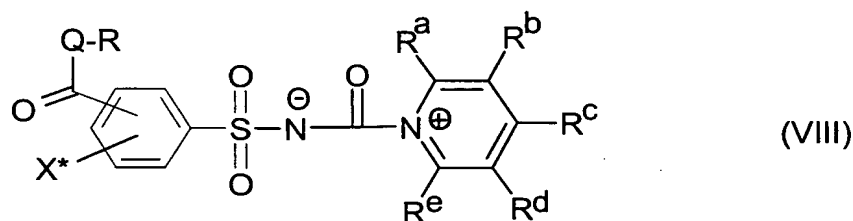
$Hal^2$  is halogen, and

$X^*$  is as defined in formula (I).

4. The process as claimed in any of claims 1 to 3, wherein in the compound of the formula (I) or its salt

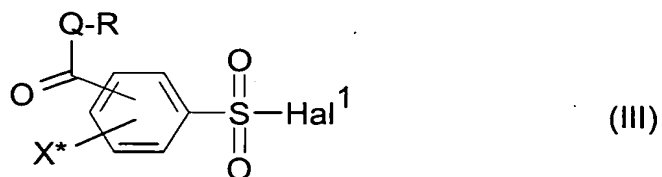
- $X^*$  is an iodine atom,  
 $R$  is methyl or ethyl,  
 $R^2$  is methoxy,  
 $R^3$  is methyl and  
 $Y$  is a nitrogen atom.

5. A process as claimed in any of claims 1 to 4, wherein the esterification to the monoester (III) is carried out in an inert organic solvent selected from the group of the nonpolar aprotic organic solvents, at a temperature of from -20°C to 100°C.
6. The process as claimed in any of claims 1 to 5, wherein the esterification to the monoester (III) is carried out using a (C<sub>1</sub>-C<sub>4</sub>)-alkanol at a temperature of from -10°C to 70°C or using an alkali metal (C<sub>1</sub>-C<sub>4</sub>)-alkoxide at a temperature of from -20°C to 50°C.
7. The process as claimed in any of claims 1 to 6, wherein the preparation of the isocyanate (V) is carried out in the presence of an aprotic polar solvent at a temperature of from -30°C to 70°C.
8. The process as claimed in claim 7, wherein the preparation of the isocyanate (V) is carried out in the presence of an N-heteroaromatic compound.
9. A compound of the formula (VIII)



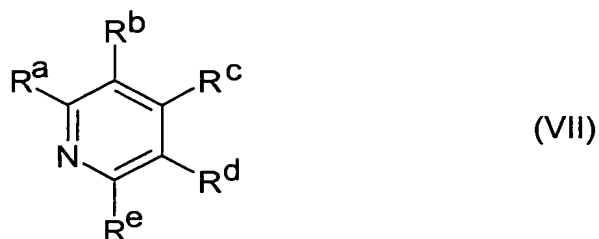
where R, Q and X\* are as defined in formula (I) as set forth in claim 1 and R<sup>a</sup>, R<sup>b</sup>, R<sup>c</sup>, R<sup>d</sup> and R<sup>e</sup> are each independently of one another hydrogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl or (C<sub>1</sub>-C<sub>6</sub>)-alkoxy or two adjacent radicals together with the linking carbon atoms of the first ring form a fused-on carbocyclic ring having 4 to 8 carbon atoms or a heterocyclic ring having 4 to 8 ring atoms and 1, 2 or 3 heteroring atoms selected from the group consisting of N, O and S.

10. A process for preparing compounds of the formula (VIII) as defined in claim 9, which comprises reacting a compound of the formula (III)



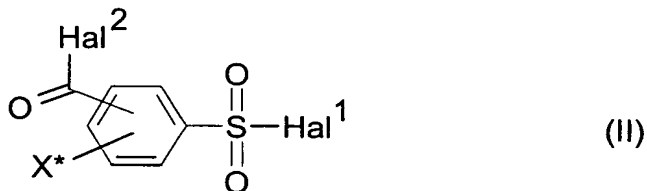
where Hal<sup>1</sup> is a halogen atom

with a cyanate in the presence of a compound of the formula (VII)

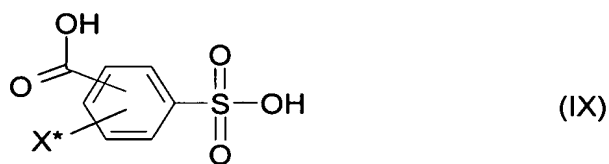


where in the formulae (III) and (VII) the radicals R, R<sup>a</sup>, R<sup>b</sup>, R<sup>c</sup>, R<sup>d</sup>, R<sup>e</sup>, Q and X\* are as defined in formula (VIII).

11. A process for preparing compounds of the formula (II)



where Hal<sup>1</sup> and Hal<sup>2</sup> are each independently of one another a halogen atom and X\* is hydrogen, halogen, cyano, nitro, (C<sub>1</sub>-C<sub>3</sub>)-alkyl or methoxy, which comprises converting a compound of the formula (IX) or a salt thereof



where  $X^*$  is as defined in formula (II)

with one or more halogenating agents selected from the group of the inorganic acid halides of sulfur or phosphorus, in one or more reaction steps, into the compound of the formula (II).

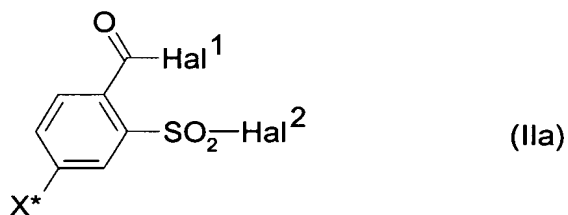
12. The process as claimed in claim 11, wherein

the halogenating agent used is thionyl fluoride, thionyl chloride, sulfuryl chloride, phosphorus trichloride, phosphoryl chloride, phosphorus pentachloride or phosphorus tribromide.

13. The process as claimed in claim 11 or 12, wherein the process is carried out in the presence of an inert organic solvent and a catalyst selected from the group of the sterically hindered amine bases.

14. The process as claimed in any of claims 11 to 13, wherein the reaction temperature is in the range from 20°C to 150°C.

15. A compound of the formula (IIa)



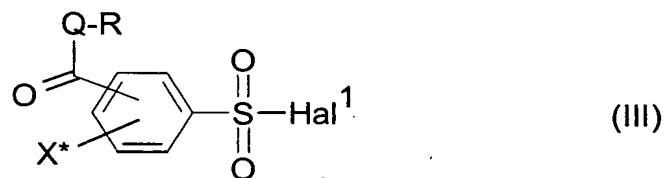
where  $\text{Hal}^1$  and  $\text{Hal}^2$  are each independently of one another a halogen atom and  $X^*$  is an iodine atom.

16. The compound as claimed in claim 15, wherein  $\text{Hal}^1$  and  $\text{Hal}^2$  are each a chlorine atom and  $X^*$  is an iodine atom.

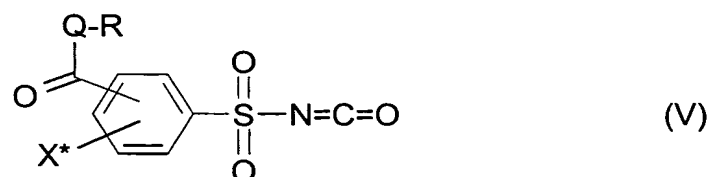
AMENDED SHEET



17. A process for preparing a compound of the formula (I), or a salt thereof, as defined in claim 1, wherein a compound of the formula (III)



where R and Q are as defined in formula (I) and X\* is as defined in formula (I), is converted with a cyanate into the isocyanate of the formula (V)

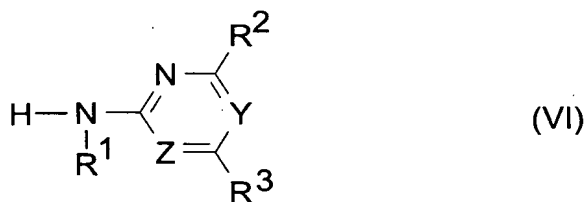


where R, Q and X\* are as defined in formula (III),

or a solvated (stabilized) derivative thereof,

and

the resulting compound (V) or its stabilized derivative is converted with a heterocyclic amine of the formula (VI)



where R¹, R², R³, Y and Z are as defined in formula (I), into the sulfonylurea of the formula (I) or a salt thereof.